USGS
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Earthquake Shaking — Green Alert

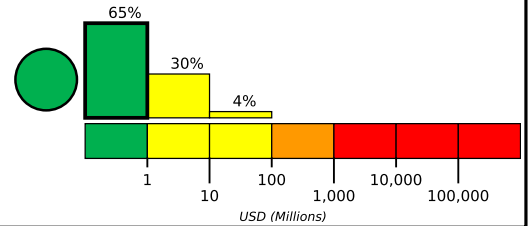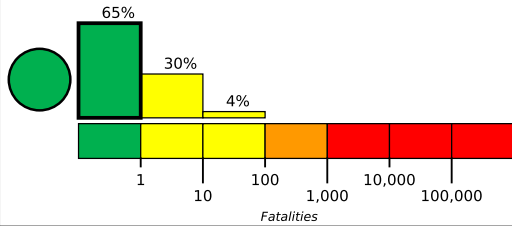GSN · USAID FROM THE AMERICAN PEOPLE · ANSS

PAGER
Version 1

M 4.0, 4km NNE of Magna, Utah

Origin Time: 2020-03-18 13:10:16 UTC (Wed 07:10:16 local)
Location: 40.7475° N 112.0802° W Depth: 6.9 km

Created: 1 day, 1 hour after earthquake

Estimated Fatalities

65% 30% 4%

1 10 100 1,000 10,000 100,000

Fatalities

Green alert for shaking-related fatalities and economic losses. There is a low likelihood of casualties and damage.
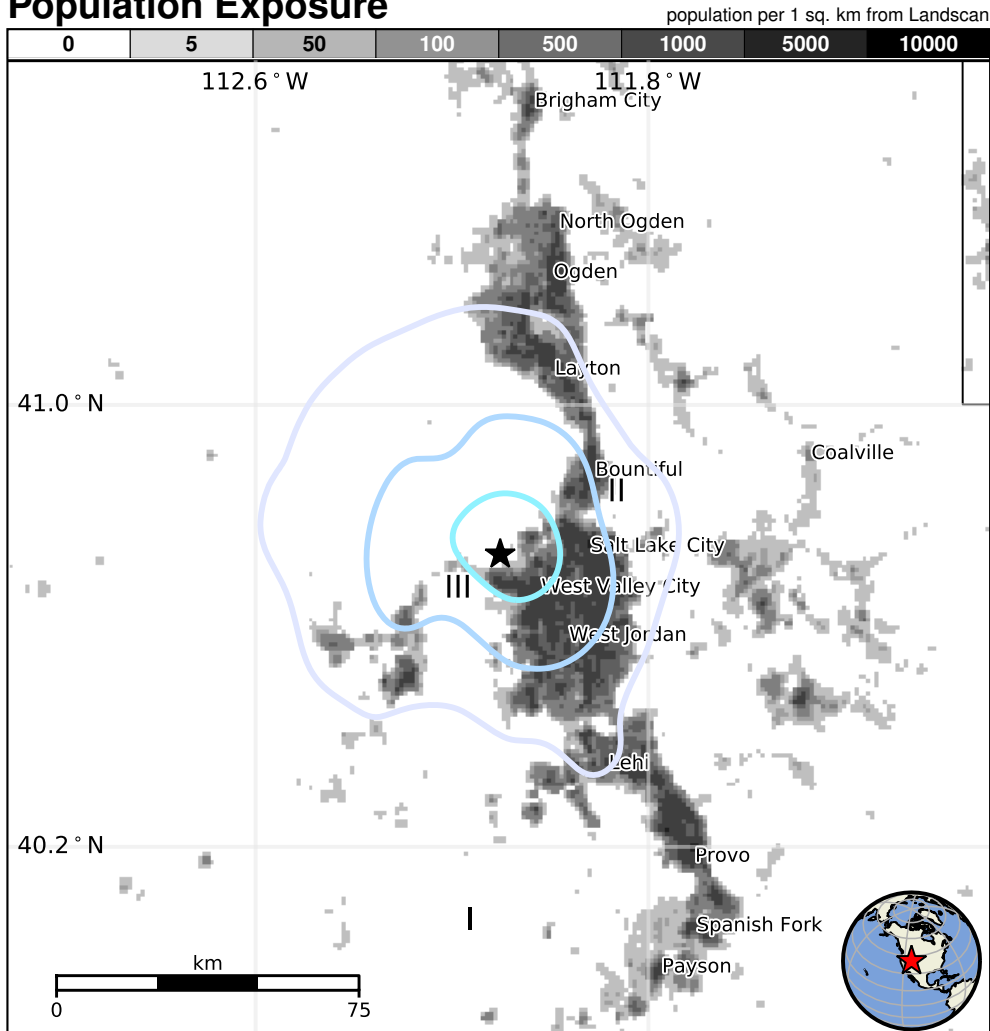
Estimated Economic Losses

65% 30% 4%

1 10 100 1,000 10,000 100,000

USD (Millions)

Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)		862k	1,611k	157k	0	0	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

*Estimated exposure only includes population within the map area.

Population Exposure

population per 1 sq. km from Landscan

0	5	50	100	500	1000	5000	10000

Structures

Overall, the population in this region resides in structures that are resistant to earthquake shaking, though vulnerable structures exist. The predominant vulnerable building types are unreinforced brick masonry and reinforced masonry construction.

Historical Earthquakes

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
1983-10-28	398	5.6	V(8k)	–
1994-02-03	243	5.8	VIII(1k)	–
1983-10-28	396	6.9	VII(2k)	2

Recent earthquakes in this area have caused secondary hazards such as landslides that might have contributed to losses.

Selected City Exposure

from GeoNames.org

MMI	City	Population
IV	Magna	27k
IV	**West Valley City**	**129k**
III	Kearns	36k
III	Taylorsville	59k
III	Oquirrh	12k
III	South Salt Lake	24k
III	**Salt Lake City**	**186k**
III	**West Jordan**	**104k**
II	Sandy Hills	90k
I	**Provo**	**112k**
I	Orem	88k

bold cities appear on map.   (k = x1000)

PAGER content is automatically generated, and only considers losses due to structural damage.
Limitations of input data, shaking estimates, and loss models may add uncertainty.
https://earthquake.usgs.gov/earthquakes/eventpage/uu60020264#pager

Event ID: uu60020264